

of Transportation

Research and

400 Seventh Street, S.W. Washington, D.C. 20590

Research and Special Programs Administration

## DOT-E 10084 (THIRD REVISION)

EXPIRATION DATE: October 31, 2001

(FOR RENEWAL, SEE 49 CFR \$ 107.109)

1. GRANTEE: Old Bridge Chemical, Inc.
Old Bridge, New Jersey

- 2. <u>PURPOSE AND LIMITATION</u>: This exemption authorizes the continued use of non-DOT specification cargo tanks manufactured from glass fiber reinforced plastics (GFRP) for transportation in commerce of certain Class 8 and 9 materials. This exemption provides no relief from any regulation other than as specifically stated herein. (NOTE: Reference to 49 CFR sections in this exemption, relating to the construction of the cargo tanks, are to regulations in effect on September 30, 1990).
- 3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
- 4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR \$\$ 173.241, 173.242, 173.243 in that non-DOT specification packaging is authorized; and \$\$ 178.340, 178.342, 178.343, only as specified herein.
- 5. <u>BASIS</u>: This exemption is based on the application of Old Bridge Chemical, Inc., dated September 10, 1999, submitted in accordance with § 107.109.
- 6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Hazardous materials description proper shipping name	Hazard Class/ Division	Identi- fication Number	Packing Group
Corrosive liquid, acidic organic, n.o.s. (Cupric chloride and Hydrochloric acid)	8	UN3264	II

Hazardous materials description proper shipping name	Hazard Class/ Division	Identi- fication Number	Packing Group
Corrosive liquid, acidic, inorganic, n.o.s. (Zinc Sulfate & Phosphoric acid)	8	UN3264	III
Environmentally hazardous substance, liquid, n.o.s. (Zinc sulfate)	9	UN3082	III
Hydrochloric acid, solution	8	UN1789	II
Zinc Chloride Solution	8	UN1840	III

- PACKAGING AND SAFETY CONTROL MEASURES: a. Packagings prescribed are non-DOT specification glass fiber reinforced plastics (GFRP) cargo tanks having a design pressure of 35 psig. Tanks may have an inside diameter between 48 to 60 inches and a water capacity between 3,600 to 5,700 gallons. Tanks must be designed and constructed in accordance with Composite Engineering drawings CE-101-88A and CE-102-88 through CE-105-88 dated November 3, 1988, calculations, and technical specifications on file with the Office of Hazardous Materials Exemptions and Approvals (OHMEA). The GFRP cargo tanks must be in full compliance with DOT Specification MC-312 (§§ 178.340 and 178.343) cargo tanks, except as follow:
  - 1. §§ 178.340-3, 178.343-2(a) Type of material does not apply. Instead, tank shell, heads and fittings must be constructed of GFRP in accordance with the data on file with the OHMEA.
  - 2. §178.340-5 Not applicable.
  - 3. §178.340-7 Reinforcement provided by the GFRP-FOAM-GFRP sandwich construction may be substituted for the circumferential reinforcement prescribed in 49 CFR 178.340-7 provided the resultant reinforcement produces a structural integrity at least equal to that prescribed in § 178.340-4(b).
  - 4. § 178.340-10(b)(1) "DOT-E 10084" must be stamped on the line which reads "Specification identification" on the metal certification plate.

- 5. § 178.340-10(c) The manufacturer's certificate retained by the motor carrier must be appropriately modified to reflect compliance with the terms of this exemption.
- b. <u>TESTING</u> Each cargo tank must be reinspected and hydrostatically retested annually in accordance with 49 CFR Part 180 as prescribed for DOT Specification MC-312 cargo tanks, as appropriate, at one and one-half times the design pressure. The visual inspection must look for any cracks, delaminations, gouges, debonding at saddles, liner deterioration, and broken items as a minimum.

## c. OPERATIONAL CONTROLS

- (1) No new construction is authorized.
- (2) The compatibility of commodities and the GFRP cargo tank must be based on ASTM C 581 "Standard Test Method for Chemical Resistance of Thermosetting Resins Used in Glass Fiber Reinforced Structures". Test reports must be maintained by the owner or manufacturer for as long as the cargo tank remains in active operation.
- (3) Any repair to the cargo tank not affecting its structural integrity must be made in accordance with the manufacturer's recommendations on file with the OHMEA and the owners of these cargo tanks. Any repair to the cargo tank affecting its structural integrity must be made in accordance with the "Maintenance/Quality Retention Requirements for Composite Cargo Tanks Per DOT Specification MC 312" submitted by the petitioner's application of November 3, 1988. After repair, the tank must be hydrostatically retested at one and one-half times the design pressure. A record of the repairs made and testing performed must be maintained by the owners of the cargo tank for as long as the cargo tank remains in service and a report describing the repairs, must be filed with the OHMEA by the cargo tank owner. All repairs must be made by a facility registered with the OHMEA as a repair facility. (See §§ 107.501 through 107.504).

(4) The cargo tank owner(s) must follow the "Quality Assurance Requirements for Production of Composite Cargo Tanks Per DOT Specification MC 307/312" submitted by the petitioner's application of July 17, 1991 and "Qualification Requirements for Composite Cargo Tanks Per DOT Specification MC 312" dated February 27, 1989. Hydrostatic test pressure must be maintained for a minimum of five minutes.

## 8. SPECIAL PROVISIONS.

- a. A person who is not a holder of this exemption who receives a package covered by this exemption may reoffer it for transportation provided no modifications or changes are made to the package and it is reoffered for transportation in conformance with this exemption and the HMR.
- b. A current copy of this exemption must be maintained at each facility where the package is offered or reoffered for transportation.
- c. <u>MARKING</u>. Each cargo tank must be plainly marked on the left side near the front, in letters at least two inches high on a contrasting background, "DOT-E 10084".
- 9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle.

## 10. MODAL REQUIREMENTS:

- a. A copy of this exemption must be carried aboard each motor vehicle used to transport materials covered by this exemption.
- b. Drivers must have been instructed as to necessary safeguards and proper procedures in the event of unusual delay, fire, or accident.
- 11. <u>COMPLIANCE</u>: Failure by a person to comply with any of the following may result in suspension or revocation of this exemption and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 <u>et seg</u>:
  - o All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
  - o Registration required by § 107.601 et seg., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this exemption must receive training on the requirements and conditions of this exemption in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this exemption, including display of its number, when the exemption has expired or is otherwise no longer in effect.

12. REPORTING REQUIREMENTS: The carrier is required to report any incident involving loss of packaging contents or packaging failure to the Associate Administrator for Hazardous Materials Safety (AAHMS) as soon as practicable. (Sections 171.15 and 171.16 apply to any activity undertaken under the authority of this exemption.) In addition, the holder(s) of this exemption must inform the AAHMS, in writing, of any incident involving the package and shipments made under the terms of this exemption.

Issued at Washington, D.C.:

) Alan I. Roberts//

Associate Administrator

for Hazardous Materials Safety

NOV 4 1999

(DATE)

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Research and Special Programs Administration, Department of Transportation, Washington, D.C. 20590. Attention: DHM-31.

The original of this exemption is on file at the above office. Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

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